

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A system to provide a determination of an alignment of a prosthetic bearing in an acetabular prosthesis, the system comprising:
 - a trial shellbearing liner;
 - a plurality of attachment devices defined by the trial shellbearing liner; and
 - an attachment member moveable between a locating position and a fastened position to selectively and operably interconnect said trial shellbearing liner to the acetabular prosthesis via at least one of said plurality of attachment devices;
 - wherein said trial shellbearing liner is moveable in one degree of freedom around an axis defined by said attachment member in said locating position and substantially immobile relative to the acetabular prosthesis in said fastened position.

2. (Previously Presented) The system of claim 1, wherein the acetabular prosthesis includes:
 - an acetabular cup generally defining a portion of a hollow sphere and defining a bore, said attachment member engaging said acetabular cup at said bore in said locating position and said fastened position.

3. (Previously Presented) The system of claim 2 wherein said attachment member includes:

an attachment end engaged with said bore;

a central portion extending through at least one of said plurality of attachment devices; and

an engagement end operable to move said attachment member between said locating position and said fastened position.

4. (Currently Amended) A system to provide a determination of an alignment of a prosthetic bearing in an acetabular prosthesis, the system comprising:

a trial shellbearing liner defining an attachment device thereon;

an attachment member moveable between a locating position and a fastened position to selectively and operably interconnect said trial shellbearing liner to the acetabular prosthesis via said attachment device; and

a locking member adapted to engage said attachment member to operably couple said attachment member to said trial shellbearing liner;

wherein said trial shellbearing liner is moveable in one degree of freedom around an axis defined by said attachment member in said locating position and substantially immobile relative to the acetabular prosthesis in said fastened position;

wherein said attachment member includes:

an attachment end engagable with a bore defined by the acetabular prosthesis;

a central portion extending through said attachment device; and

an engagement end for manipulating said attachment member between said locating position and said fastened position.

5. (Currently Amended) The system of claim 1 wherein the acetabular cup includes an outer rim defining an acetabular cup plane and said trial shellbearing liner includes an outer rim defining a trial shellbearing liner plane, wherein the location of at least one of said plurality of attachment devices determines a predetermined angle said trial shellbearing liner plane is oriented relative to the acetabular cup plane.

6. (Original) The system of claim 5 wherein said predetermined angle is between 0 and 40 degrees.

7. (Currently Amended) The system of claim 1 wherein each of said plurality of attachment devices include a passage defined by said trial shellbearing liner for receiving said attachment member.

8. (Currently Amended) A system to provide a determination of an alignment of a prosthetic bearing in an acetabular prosthesis, the system comprising:
a first trial shellbearing liner defining a first trial shellbearing liner plane and defining a first attachment device;
a second trial shellbearing liner defining a second trial shellbearing liner plane and defining a second attachment device; and

an attachment member moveable between a locating position and a fastened position to selectively and alternatively interconnect each of said first and second trial shellbearing liner to the acetabular prosthesis via said respective attachment device, each of said first and second trial shellbearing liner moveable in one degree of freedom around an axis defined by said attachment member in said locating position;

wherein said first trial shellbearing liner plane is oriented at a first angle relative to acetabular cup plane in said locating position and said second trial shellbearing liner plane is oriented at a second angle relative to said acetabular cup plane in said locating position, said second angle distinct from said first angle.

9. (Currently Amended) The system of claim 8 wherein said first attachment device is defined at a distinct location on said first trial shellbearing liner from said second attachment device on said second trial shellbearing liner.

10. (Previously Presented) The system of claim 8, wherein the acetabular prosthesis includes:

an acetabular cup generally defining a portion of a hollow sphere and defining a bore, said attachment member engaging said bore in said locating position and said fastened position.

11. (Previously Presented) The system of claim 8, wherein said attachment member includes:

an attachment end operable to engage said acetabular cup via said bore;
a central portion extending through said attachment device; and
an engagement end for manipulating said attachment member between
said locating and said fastened position.

12. (Currently Amended) A system to provide a determination of an alignment of a prosthetic bearing in an acetabular prosthesis, the system comprising:

a first trial shellbearing liner defining a first trial shellbearing liner plane and defining a first attachment device;

a second trial shellbearing liner defining a second trial shellbearing liner plane and defining a second attachment device;

an attachment member moveable between a locating position and a fastened position to selectively and alternatively interconnect each of said first and second trial shellbearing liner to the acetabular prosthesis at said respective attachment device, each of said first and second trial shellbearing liner moveable in one degree of freedom around an axis defined by said attachment member in said locating position; and

a locking member adapted to engage said attachment member to operably couple said attachment member and one of said first and second trial shellbearing liner;

wherein said first trial shellbearing liner plane is oriented at a first angle relative to an acetabular cup plane in said locating position and said second trial

shellbearing liner plane is oriented at a second angle relative to said acetabular cup plane in said locating position, said second angle distinct from said first angle.

13. (Currently Amended) The system of claim 8, further comprising a third trial shellbearing liner defining a third trial shellbearing liner plane and defining a third attachment device, said third trial shellbearing liner plane defining a third distinct angle relative to said acetabular cup plane from said first and second trial shellbearing liner plane when assembled in said locating position.

14. (Original) The system of claim 13 wherein said first, second and third angle is between 0 and 40 degrees.

15. (Currently Amended) The system of claim 8 wherein said first or second attachment device defines a passage through said first and second trial shellbearing liner for allowing said attachment member to pass through said first or second trial shellbearing liner.

16. (Currently Amended) A system to provide a determination of an alignment of a prosthetic, the system comprising:

- an acetabular prosthesis operable to be implanted;
- a trial shellbearing liner defining an attachment device; and

an attachment member moveable between a locating position and a fastened position to selectively and operably interconnect said trial shellbearing liner to said acetabular prosthesis via said attachment device; and

an acetabular cup generally defining a portion of a hollow sphere and defining a bore, said attachment member engaging said acetabular cup via said bore in said locating position and said fastened position;

wherein said trial shellbearing liner is moveable in one degree of freedom around an axis defined by said attachment member in said locating position and substantially immobile relative to said acetabular prosthesis in said fastened position.

17. (Canceled)

18. (Currently Amended) The system of claim [[17]]16 wherein said attachment member includes:

an attachment end engaged with said acetabular cup via said bore;
a central portion extending through said attachment device; and
an engagement end operable to move said attachment member between said locating position and said fastened position.

19. (Currently Amended) A system to provide a determination of an alignment of a prosthetic, the system comprising:

an acetabular prosthesis;

a trial shellbearing liner defining an attachment device;

an attachment member moveable between a locating position and a fastened position to selectively and operably interconnect said trial shellbearing liner to said acetabular prosthesis via said attachment device; and

a locking member adapted to engage said attachment member to operably couple said attachment member and said trial shellbearing liner;

wherein said trial shellbearing liner is moveable in one degree of freedom around an axis defined by said attachment member in said locating position and substantially immobile relative to said acetabular prosthesis in said fastened position;

wherein said attachment member includes:

an attachment end engagable with a bore defined by said acetabular prosthesis;

a central portion extending through said attachment device; and

an engagement end operable to move said attachment member between said locating and said fastened position.

20. (Currently Amended) The system of claim 17 wherein the acetabular cup includes an outer rim defining an acetabular cup plane and said trial shellbearing liner includes an outer rim defining a trial shellbearing liner plane, wherein the location of said attachment device determines a predetermined angle said trial shellbearing liner plane is oriented from the acetabular cup plane.

21. (Original) The system of claim 20 wherein said predetermined angle is between 0 and 40 degrees.

22. (Currently Amended) The system of claim 16 wherein said attachment device includes a passage defined by said trial shellbearing liner for receiving said attachment member.

23. (Currently Amended) A method of implanting an acetabular prosthesis in an acetabulum and providing a liner in the acetabular prosthesis in a selected orientation, the method comprising:

implanting the acetabular prosthesis;

disposing a first trial shellbearing liner in said implanted acetabular prosthesis, said first trial shellbearing liner having an outer dimension defining a first plane and extending at a first angle from said implanted acetabular prosthesis;

orienting said first trial shellbearing liner having one degree of freedom in a first orientation;

fixing said first trial shellbearing liner in said first orientation with an attachment member that selectively couples said first trial bearing liner to the acetabular prosthesis;

locking the attachment member to said first trial bearing liner; and

moving a femur through a range of motion relative to the first trial shellbearing liner.

24. (Currently Amended) The method of claim 23 further comprising:

removing said first trial shellbearing liner;

disposing a second trial shellbearing liner in said acetabular prosthesis, said second trial shellbearing liner having an outer dimension defining a second plane and extending at a second angle from said acetabular prosthesis, said second angle distinct from said first angle;

orienting said second trial shellbearing liner having one degree of freedom in a second orientation;

fixing said second trial shellbearing liner in said second orientation; and

moving said femur through a range of motion relative to said second trial shellbearing liner.

25. (Currently Amended) The method of claim 23 wherein orienting said first trial shellbearing liner includes rotating said first trial shellbearing liner around ansaid attachment member selectively coupling said first trial shellbearing liner to the acetabular prosthesis.

26. (Currently Amended) The method of claim 25 wherein fixing the first trial shellbearing liner includes actuating said attachment member into a fastened position wherein said first trial shellbearing liner is substantially immobile relative to the acetabular prosthesis.

27. (Currently Amended) The method of claim 23, further comprising:
placing a head extending from said femur in said first trial shellbearing liner;
moving said femur through a range of motion while maintaining said head in said first trial shellbearing liner; and
determining the presence of contact between said femur and said first trial shellbearing liner.

28. (Currently Amended) A method of implanting an acetabular prosthesis in an acetabulum and providing a liner in the acetabular prosthesis in a selected orientation, the method comprising:

implanting the acetabular prosthesis, the acetabular prosthesis defining an acetabular cup plane;

disposing a first trial shellbearing liner in said implanted acetabular prosthesis, said first trial shellbearing liner having an outer dimension defining a first plane and extending at a first angle relative to said implanted acetabular prosthesis;

orienting said first trial shellbearing liner having one degree of freedom in a first orientation;

fixing said first trial shellbearing liner in said first orientation;

determining the presence of contact between a femur and said first trial shellbearing liner; and

replacing said first trial shellbearing liner with a second trial shellbearing liner in said implanted acetabular prosthesis based on said determination, said second trial shellbearing liner having an outer dimension defining a second plane and extending at a second angle relative to said acetabular cup plane, said second angle distinct from said first angle.

29. (Currently Amended) The method of claim 28 wherein determining the presence of contact includes:

placing a head extending from said femur in said first trial shellbearing liner;

moving said femur through a range of motion while maintaining said head in said first trial shellbearing liner; and

determining the presence of contact between said femur and said first trial shellbearing liner.

30. (Currently Amended) The method of claim 28 wherein orienting said first trial shellbearing liner includes rotating said first trial shellbearing liner around an attachment member selectively coupling said first trial shellbearing liner to the acetabular prosthesis.

31. (Currently Amended) The method of claim 28 wherein disposing a first trial shellbearing liner includes:

placing said first trial shellbearing liner in the acetabular prosthesis;
aligning a first attachment device defined by said first trial shellbearing liner with a bore defined by the acetabular prosthesis; and

engaging the acetabular prosthesis with an attachment member at said bore thereby coupling said first trial shellbearing liner with the acetabular prosthesis.

32. (Currently Amended) The method of claim 31 wherein fixing said first trial shellbearing liner includes actuating said attachment member into a fastened position wherein said first trial shellbearing liner is substantially immobile relative to the acetabular prosthesis.

33. (Currently Amended) The method of claim 31 wherein replacing said first trial shellbearing liner includes:

removing said attachment member from engagement with said first trial shellbearing liner and the acetabular prosthesis;

removing said first trial shellbearing liner from the acetabular prosthesis;

placing said second trial shellbearing liner in the acetabular prosthesis;

aligning a second attachment device defined by said second trial shellbearing liner with said bore; and

engaging the acetabular prosthesis with said attachment member at said bore thereby coupling said second trial shellbearing liner with the acetabular prosthesis.